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AMSAT NEWS SERVICE
ANS-224

The AMSAT News Service bulletins are a free, weekly news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS publishes news related to Amateur Radio in Space including reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

The news feed on http://www.amsat.org publishes news of Amateur Radio in Space as soon as our volunteers can post it.

Please send any amateur satellite news or reports to:
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ANS-224 AMSAT News Service Weekly Bulletins

AMSAT News Service Bulletin 224.01
>From AMSAT HQ KENSINGTON, MD.
August 12, 2018
To All RADIO AMATEURS
BID: $ANS-224.01

Charter Member, Past AMSAT President William A. "Bill" Tynan, W3XO, SK

It is with great sadness that AMSAT reports one of its founding directors and charter members, William A. (Bill) Tynan, W3XO, passed away peacefully at his home on Tierra Linda Ranch in Kerrville Texas,

on August 7, 2018. He was 91.

Bill was born October 12, 1926 in Saint Paul, Ramsey County, Minnesota. But, throughout his adult, life, he left an indelible mark on Amateur Radio with a long list of "firsts" since becoming licensed as W3KMV in early 1946. Indeed, Bill was in the forefront of Amateur Radio's growth and importance in many ways. His singularly distinctive accomplishments to our Amateur Radio Service were, quite literally, "out of this world."

His active Amateur Radio interest really began in the mid-30s when he was a young boy. During the Second World War, and after obtaining a Restricted Radio Telephone Permit, he operated in the War Emergency Radio Service (WERS), donating his time to the effort to the citizens of Montgomery County, Maryland and, later, to the District of Columbia by operating WERS systems on 2 1/2 meter VHF (then called UHF). Of course, this occurred during a time when all Amateur Radio activity had been suspended for the duration of the War.

His wartime activity would later spark his interest in the frequencies above 30 MHz, and he became an active VHF/UHF enthusiast almost since obtaining his first Ham ticket. However, it was his work in helping others exploit the VHF/UHF spectrum that best characterized Bill's numerous accomplishments and contributions to Amateur Radio.

For example, in early 1969, Bill attended the charter meeting in Washington, DC to investigate the feasibility of carrying on the work of Project OSCAR, a group of West Coast Hams that had built and launched the very first satellites carrying Amateur Radio. The meeting later led to the establishment of today's Radio Amateur Satellite Corporation (AMSAT). Bill was elected to the first Board of Directors of the new organization, and was later named Vice President for Operations.

Bill performed yeoman service in this position during the OSCAR 6 era, principally because that particular satellite had a nasty habit of unexpectedly changing operating modes "on its own". Bill's superb efforts coordinated the work of dozens of worldwide command stations to keep OSCAR 6 (then the only OSCAR satellite in orbit) up and running for the world's Amateur Radio Operators to use. His outstanding work allowed critical Amateur Radio propagation and other experiments, as well as other, more routine communications, to continue virtually unabated. His singular efforts extended use of a critical, space-based experimental Amateur Radio resource that otherwise would have been given up for lost.

Later, Bill's strong reputation for getting things done, and his expertise as a leading expert in the VHF/UHF arena, led to a request from the American Radio Relay League (ARRL) that he assume duties as Contributing Editor for QST Magazine's "World above 50 MHz" column. Under his superb guidance, and during the next 18 years, Bill kept the column both fresh and alive, while providing Hams worldwide with a powerful forum to advocate and nurture such new Amateur Radio technologies as long-haul VHF/UHF, moonbounce, DX and contest work, as well as emerging meteor scatter and satellite communications.

However, while Bill Tynan's first love was VHF and UHF work, his heart and soul were always with AMSAT. Not surprisingly, it is with AMSAT that Bill's positive impacts on Ham Radio were destined to become some of his longest lasting contributions to our Service.

For example, since his earliest days in AMSAT, Bill was intrigued with the possibility of Hams on the ground being able to talk to Hams

in space. Later, in the mid-1970's, he actively explored the idea of Amateur Radio operation from aboard the Skylab space station while Owen Garriott, W5LFL, was to be a part of that crew. Unfortunately, NASA did not approve this proposal, stating that it was too late to modify the station to provide for an antenna.

However, later, as the Shuttle program was beginning (and on behalf of AMSAT) Bill authored the very first draft proposal to allow Amateur Radio operation from the Space Shuttle. His idea was soon picked up by the ARRL, and it resulted in a formal, joint AMSAT/ARRL proposal to NASA to allow this activity. Needless to say, Bill's superb vision led directly to Owen Garriott's historic first use of Ham Radio from space during the STS-9 mission, thus marking the birth of the (then) very popular SAREX program.

In 1986, Bill was again elected to the AMSAT Board of Directors, and, in 1991, just as the Phase 3D project (which later became AMSAT-OSCAR 40 on orbit) was beginning to gain momentum, Bill assumed duties as President of the organization at a most critical period in its history. As with his previous callings, Bill wasted no time in making his lasting mark on the organization. As one of his first efforts, he was instrumental in pulling a team of over two hundred volunteer people from 13 different countries together with the common goal of building and launching the largest, most complex, and most expensive Amateur Radio satellite ever attempted. When he finally stepped down from his post as AMSAT President in late 1998, his repeated, annual re-election to this high post made his one of the longest running terms as President in the organization's history.

In addition to his solid accomplishments in furthering Amateur Radio, Bill remained a very active Radio Amateur. He was a life member of the ARRL, a life member of AMSAT (membership number 10), and was an active member of the Central States VHF Society, also serving on its Board of Directors. He was its President in 1992 and put on the organization's annual conference that year. Bill was also a member of the Quarter Century Wireless Association, the Radio Club of America, the Institute for Electrical and Electronic Engineers (IEEE) as well as the National Space Society. Locally, he was the Program Chairman of the Hill Country Amateur Radio Club at his home on the Terra Linda Ranch in Kerrville, Texas and also served on the ranch's Cable TV advisory committee.

During his lifetime, Bill also received several prestigious awards, including "The Ham of Year" in 1996 from the Dayton Amateur Radio Association (DARA) and in 2012, the Barry Goldwater Amateur Radio Award from the Radio Club of America.

Bill is survived by his wife of 51 years, the former Mattie LeNoir of Kilgore Texas, along with numerous cousins, brothers and sisters-in-law. No services will be held. However, his ashes will be scattered in two locations, the cemetery in Elgin, Texas where his wife will be interred and the cemetery in Hagersville, Ontario, Canada which is his mother's birthplace, and where his parents are buried. In lieu of flowers, the family requests that donations be made in his name to the charity of your choice.

Statement of AMSAT President Joe Spier, K6WAO, on the passing of Bill Tynan, W3XO:

I can only second the many comments and condolences that are coming in from around the world on the passing of Bill Tynan, W3XO. From the many remembrances of Bill's past accomplishments, it is clear that AMSAT and amateur radio has lost a dear friend.

Friend is an important way to honor Bill. Bill was a friend to AMSAT, a friend to ARISS, a friend to the ARRL, a friend to amateur radio, a friend to his community, and lifelong friend to his dear wife, Mattie. Bill's friendship extended to me when I became AMSAT President. After hearing me present on some subject, I received a three page treatise from Bill on the proper use of the pronoun "me." His keen ear had picked up on my error, and the improvement came in a paper titled "What's the Matter with Me?"

Bill had a way of looking at issues from a different perspective. Last October's Board of Directors meeting was in the middle of a "heated" discussion on the verbiage of a proposal, when Bill walked in and sat down. After another 15 minutes of discussion, further discussion on the proposal was tabled until the following day. Bill's comment after listening to all this was "Wow, sounds just like the board meetings we use to have 40 years ago!"

Recently, Bill asked to step down as the AMSAT OSCAR Number Administrator. Bill has been granting applicants who qualify OSCAR numbers for over two decades, since the late-1990s. Even Bill could not remember the first number he issued, but he believed it was either TO-31 or SO-35. In any case, Bill had issued at least 57 OSCAR numbers. This is over 60%, or very close to two-thirds, of all the OSCAR numbers currently issued at this time.

Bill liked to keep busy with his passion for amateur radio, whether this was working in the foreground or background. Only a few weeks ago, Bill proposed to AMSAT the use of FT-8 as a digital mode on a future satellite. My friend, Bill Tynan, W3XO, was always thinking ahead.
Ad astra.

[ANS thanks AMSAT the above information.]

Indonesian Amateurs Using IO-86 for Earthquake Ecomm

As Radio Amateurs in Indonesia respond for the second time to an Earthquake in the Lombok area, please take care to avoid causing QRM to their activities on 7.110MHz and emergency activities on satellite IO-86.

The second powerful earthquake in the area killed at least 98 people and seriously injured more than 200 others. The electricity supply in the area is disrupted and the ORARI of West Nusa Tenggara Region led by YB9KA and YB9GV have taken action to cover areas with no cellular coverage including taking battery supplies to affected repeaters. At the moment four repeaters are operating in the disaster area with ORARI HQ asking their Bali Island Region (the closest area) to provide further repeater support for use by emergency communications in Lombok.

ORARI HQ has also issued an official request to the nearest region, to help with both logistics and personnel to Lombok, and designating a National Frequency for the Lombok Earthquake at 7.110 MHz for HF, VHF on 145.500 MHz Simplex and 147.000 MHz Duplex, and also to activate ORARI Satellite LAPAN IO-86 to assist with communication.

The Central Java Region of the Indonesian Search And Rescue Council has sent a group of rescuers and vehicles, led by YB2QC the Operation and Technical Head of ORARI, to join the National Rescue Operation in Lombok and ORARI. Jakarta is also arranging the delivery of logistical assistance to Lombok.

(ANS thanks the IARU Region 1 and Dani, YB2TJV for the
above information.)

BIRDS-2 Transmit Plans Announced

JAXA's three BIRDS-2 satellites, BHUTAN-1, MAYA-1 and UiTMSat-1 are scheduled for deployment from the ISS on August 10, 2018.

All three CubeSats of BIRDS-2 project will be operating with same uplink and downlink frequency. Each CubeSat will transmit a CW beacon at 437.375 MHz. Telemetry and mission downlink will use the same frequency but only upon a successful uplink command. Each CubeSat also has an APRS digipeater on 145.825 MHz.

Since the CubeSats will be released at the same time from the ISS, there is a possibility that the beacons from three CubeSats will interfere with each other, making it difficult to decode. To avoid that, one of the measures adopted by the team is as described below.

The CubeSats will be released together, which means they will turn on almost at the same time. Once turned on, one of the first things they do is start transmission of beacon to indicate it is alive. But the CubeSats are programmed in such a way that each of them waits for a different amount of time before the beacon starts. The first satellite coming out will be BHUTAN-1 and will be the first to start transmission. It will then of beacon and it will remain silent long enough to let other two satellites finish their beacon transmissions. The initial beacon signal period is set as 115 sec (30 sec transmission and 85 sec silent time). This is a temporary schedule for the initial operation phase.

The satellites, their ID's and call signs are as follows:

Satellite	Country	ID	Call Sign
BHUTAN-1	Bhutan	BIRD-BT	JG6YKL
MAYA-1	Philippines	BIRD-PH	JG6YKM
UiTMSat-1	Malaysia	BIRD-MY	JG6YKN

(ANS thanks the Joint Global Multi-Nation BIRDS Project for the
above information.)

SiriusSat-1/SiriusSat-2 Decoding Tips

The Sputnix site has some information for radio amateurs concerning the SiriusSat-1/SiriusSat-2 satellites scheduled for release from the ISS on 15 August 2018. The following is Tod, AD0I's translation of part of the following Russian language URLs:

http://sputnix.ru/ru/nashi-sputniki/siriussat-1
http://sputnix.ru/ru/nashi-sputniki/siriussat-2

Information for Radio Amateurs

We invite all radio amateurs to take part in reception of our signals. We have prepared a decoder program which will allow you to decode practically all types of data which will be transmitted from the satellites, in the first place the beacons, and also a connection to the central telemetry database db.satnogs.org and the transmission of received packets to us and all radio amateurs (this option can be

turned off).

The satellites will work on these frequencies with the following
call signs:

SiriusSat-1 Call sign RS13S Frequency 435.570 MHz
SiriusSat-2 Call sign RS14S Frequency 435.670 MHz

GMSK 4800 modulation will be used, AX.25 G3RUH standard protocol.

SPUTNIX Telemetry Viewer can be used with standard amateur radio
software typically used for satellite reception, for example, with
the combination of Orbitron/SDRSharp and with UZ7HO's SoundModem.

Telemetry Viewer is connected with the help of AGWPE or KISS TCP
interfaces. User settings are accessible in the file
resources/config.xml.

Download SPUTNIX Telemetry Viewer (Russian, 10.2 MB):
https://tinyurl.com/Sputnix-Telemetry-Viewer-Rus

Download SPUTNIX Telemetry Viewer (English, 10.2 MB):
https://tinyurl.com/Sputnix-Telemetry-Viewwer-En

Download I/Q test recording (27.1 MB):
https://tinyurl.com/Sputnix-IQ-Test-Recording

Download audio test recording (2.5 MB):
https://tinyurl.com/Sputnix-Audio-Test-Recording

[ANS thanks Tod, AL0I for the above information.]

AMSAT 2018 Symposium Second Call for Papers

AMSAT has issued the second call for papers for the 2018 AMSAT-NA
Annual Meeting and Space Symposium to be held at the US Space and
Rocket Center in Huntsville, AL on the weekend of November 2-4.
Proposals for papers, symposium presentations, and poster
presentations are invited on any topic of interest to the amateur
satellite community. Prospects should send a tentative title of their
presentation as soon as possible. The final copy must be submitted
by October 15th for inclusion in the printed proceedings. Abstracts
and papers should be sent to Dan Schultz at n8fgv at amsat.org

[ANS thanks Dan Schultz, N8FGV for the above information.]

Call for Technical Papers & Presentations at DCC,
Albuquerque, New Mexico
September 14-16, 2018

The ARRL and TAPR DCC is an international forum for radio amateurs
to meet, publish their work, and present new ideas and techniques.
Presenters and attendees will have the opportunity to exchange ideas
and learn about recent hardware and software advances, theories,
experimental results, and practical applications.

All digital topics are covered at the DCC including digital voice,
data & video, SDR, DSP, precise timing, spread spectrum, networking
technologies and mesh networking.

Technical papers are being solicited for presentation at the ARRL and TAPR Digital Communications Conference (DCC) and printed in the annual Conference Proceedings published by the ARRL. Presentation at the conference is not required for publication although authors who attend receive priority for a scheduling a presentation during the technical forums.

If you would like to present a technical topic at the DCC and not submit a technical paper email the topic of your presentation to the TAPR Office at: taproffice at tapr dot org

Submission of technical papers for publication should be submitted ASAP to Maty Weinberg, ARRL 225 Main Street Newington, CT 06111 or via the Internet to maty at arrl dot org

More details about technical papers and guidelines for paper submissions are available at:
http://www.tapr.org/dcc#dcccallforpapers

[ANS thanks Mark Thompson for the above information.]

SSO-A Mission to Set Record for Number of Satellites Launched

Spaceflight announced details behind its SSO-A mission, the largest single rideshare mission from a US-based launch vehicle to date. Fox-1 Cliff will be among the satellites aboard this launch.

Spaceflight has contracted with more than 70 spacecraft from approximately 35 different organizations, to launch from a SpaceX Falcon 9 later this year. The mission, named SSO-A: SmallSat Express represents the company's purchase of an entire Falcon 9 to accommodate the growing number of domestic, international, government and commercial customers seeking affordable rideshare options to launch their spacecraft into orbit.

SSO-A, which signifies the company's first dedicated rideshare mission to a Sun-Synchronous Low Earth Orbit, is slated to launch from Vandenberg Air Force Base. It includes 15 microsats and 56 cubesats from commercial and government entities, of which more than 30 are from international organizations from 18 countries including United States, Australia, Italy, Netherlands, Finland, South Korea, Spain, Switzerland, UK, Germany, Jordan, Kazakhstan, Thailand, Poland, Canada, South Africa, Brazil, and India.

Planet is sending two SkySat small sats, the primary spacecraft on the launch, along with several Dove cubesats. They are also sponsoring the launch of two cubesats: one from Georgia Institute of Technology and one from University of Colorado Boulder Laboratory for Atmospheric and Space Physics.

Among the spacecraft onboard, 23 are from universities, 19 are imaging satellites, 23 are technology demonstrations, two are art exhibits, and one is from a high school. Seventy-five percent are commercial spacecraft.

A few notable customers include University of North Carolina-Wilmington, NovaWurks, Ghalam, Helios Wire / Sirion Global, King Mongkut's University of Technology North Bangkok (KMUTNB), Astrocast, Honeywell Aerospace, HawkEye 360, Nevada Museum of Art, Fleet Space Technologies, Korea Advanced Institute of Science and Technology, Audacy, Capella Space Corporation, University of Colorado Boulder Laboratory for Atmospheric and Space Physics, and many others.

With the majority of the spacecraft being integrated in Spaceflight's Auburn, WA facility, the stack is one of the most complex and intricate endeavors the company has undertaken. The smallsats will be integrated with a variety of dispensers and avionics to an upper free flyer and lower free flyer.
[ANS thanks Spaceflight for the above information]

NASA Assigns Crews to First Test Flights, Missions on Commercial Spacecraft

NASA introduced to the world on Friday the first U.S. astronauts who will fly on American-made, commercial spacecraft to and from the International Space Station - an endeavor that will return astronaut launches to U.S. soil for the first time since the space shuttle's retirement in 2011.

"Today, our country's dreams of greater achievements in space are within our grasp," said NASA Administrator Jim Bridenstine. "This accomplished group of American astronauts, flying on new spacecraft developed by our commercial partners Boeing and SpaceX, will launch a new era of human spaceflight. Today's announcement advances our great American vision and strengthens the nation's leadership in space."

The agency assigned nine astronauts to crew the first test flight and mission of both Boeing's CST-100 Starliner and SpaceX's Crew Dragon. NASA has worked closely with the companies throughout design, development and testing to ensure the systems meet NASA's safety and performance requirements.

"The men and women we assign to these first flights are at the forefront of this exciting new time for human spaceflight," said Mark Geyer, director of NASA's Johnson Space Center in Houston. "It will be thrilling to see our astronauts lift off from American soil, and we can't wait to see them aboard the International Space Station." Additional crew members will be assigned by NASA's international partners at a later date.

NASA's continuous presence on the space station for almost 18 years has enabled technology demonstrations and research in biology and biotechnology, Earth and space science, human health, physical sciences. This research has led to dramatic improvements in technology, infrastructure and medicine, and thousands of spinoff technologies that have improved quality of life here on Earth.

The new spaceflight capability provided by Boeing and SpaceX will allow NASA to maintain a crew of seven astronauts on the space station, thereby maximizing scientific research that leads to breakthroughs and also aids in understanding and mitigating the challenges of long-duration spaceflight.

NASA's Commercial Crew Program is facilitating the development of a U.S. commercial crew space transportation capability with the goal of achieving safe, reliable and cost-effective access to and from the International Space Station and low-Earth orbit. The public-private partnerships fostered by the program will stimulate growth in a robust commercial space industry and spark life-changing innovations for future generations.

Further information at https://tinyurl.com/nasa-commercial-crew.

[ANS thanks NASA for the above information]

AMSAT Board of Director Elections Corrected Ballots Due
September 15, 2018

Corrected ballots were mailed and members should have received them. The new ballots, labeled "CORRECTED BALLOT 7/20/2018" are printed on yellow-colored cardstock.

Using the Yellow Ballots, please vote for no more than three of the 2018 candidates:

Tom Clark, K3IO
Mark Hammond, N8MH
Scott Harvey, KA7FVV
Bruce Paige, KK5DO
Peter Portanova, W2JV

Candidate biographies can be viewed at:
https://www.amsat.org/bios2018/

The Directors positions will go to the three candidates receiving the highest number of votes. In addition, there will be two alternate members chosen, based on the next highest number of votes received.

Ballots must be received at the AMSAT office by September 15, 2018 in order to be counted. Those sent outside North America were sent via air mail. If you have not received your ballot package in a reasonable time for your location, please contact the AMSAT office. Completed ballots should be returned as promptly as possible, and those from outside North America preferably by air mail.

[ANS thanks AMSAT for the above information.]

Upcoming Satellite Operations as of 8/8/2018

Iceland (HP84, HP94, and HP95) - August 9-14, 2018
Gareth, G0MFR, will be in Iceland 9-14 August, activating grids HP94/95/84 and looking for NA QSOs on FM Sats.

Rocky Mountain High - August 10-14, 2018
Chris, K7TAB is heading from his home QTH (DM43) to DN70 on August 10th. Possible activations of DM55/56/57/58/48/38 on Aug 10-11 on the way, This will be a combined SOTA and AMSAT trip. Chris has an empty dance card, so stay tuned to his Twitter account, publicly viewable at https://twitter.com/K7TABravo for further announcements.

Bonneville Salt Flats, UT (DN30) - August 10-17, 2018
R.J., WY7AA, is heading to Speedweek at the Bonneville Salt Flats in Utah. Enroute and while there, he also plans to activate DN51, DN41, DN40, and DN20). Specific pass announcements will be posted to Twitter, publicly viewable at https://twitter.com/WY7AA

Ocean City, MD (FM28) - August 11-14, 2018
Brennan, N4QX, will be activating FM28, while visiting Ocean City, MD. This will be holiday-style and FM only. Pass announcements will be posted to his Twitter page, publicly viewable at https://twitter.com/BrennanTPrice

Vancouver Island/Olympia National Park (CO60, CO70, CN79) - August 12-13, 2018

Ron, AD0DX, will be in the Vancouver / Vancouver Island area and at Olympia National Park. He will make a special trip to CO60 on Sunday Aug 12th evening and in Campbell River, BC for 24 hours over Aug 12 and 13 so there should be lots of opportunities for CO70 and CO79. More information is available on AD0DX's QRZ page, to include planned grid activation for his return trip home. Updates will be posted on Twitter, publicly viewable at https://twitter.com/ad0dx

New England Grids (FN01, FN10, FN11, and FN21) - August 11-15, 2018
Charlie, N3CRT is heading out on a family vacation, and he]s bringing his satellite gear. Plan is 8/11 FN21 and FN11, 8/12-13 FN11 and FN01, 8/14 FN11, 8/15 FN10. FM sats only. Pass announcements will be posted on Twitter, publicly viewable at https://twitter.com/charlieray

Maine (FN44, FN53, and FN55) - August 12-18, 2018
Adam, K0FFY, will be visiting the State of Maine, August 12-18. Considerate enough to bring along his satellite gear, Adam expects to activate FN44, FN53, and FN 55. Updates will be posted on Twitter, publicly viewable at https://twitter.com/K0FFY_Radio

Lancaster, PA (FN10) - August 15-16, 2018
Brennan, N4QX, will be visiting Lancaster, PA. While there, he will activate FN10, holiday-style, FM only. Updates will be posted on Twitter, publicly viewable at https://twitter.com/BrennanTPrice

On the Way to Kansas (EM19, EM39, and EM49) - August 15-16, 2018
Joe, KE9AJ, will be activating will be stopping in a few grids on his way to Kansas. Look for him in EM19 on August 15th, and EM39 and EM49 on August 16th. This will be an FM only trip. Pass announcements will be posted on Twitter, publicly viewable at https://twitter.com/KE9AJ

Road to Huntsville, Alabama (EM53, EM54, EM55, EM63, EM64, EM65) - August 16-19, 2018
Robert, KE4AL, will be heading to the Huntsville Hamfest August 16th. Enroute, he will activate EM53/EM63, EM54/EM55, and EM64/EM65 gridlines. August 17th, Robert will be operating from the U.S. Space & Rocket Center (EM64) and scouting out the venue for the 36th Annual AMSAT Space Symposium and General Meeting, which will be held November 2-4, 2018. In addition, Robert will be providing AMSAT demonstrations at the Huntsville Hamfest (EM64), August 18-19. Specific passes will be announced on Twitter, publicly viewable at https://twitter.com/KE4ALabama

Geneva Switzerland - August 20-22, 2018
Brennan, N4QX, will be visiting Geneva Switzerland August 19-29, operating under the call HB9/N4QX. This will be a holiday style, FM only trip. Specific pass and grid activations will be posted on his Twitter page, publicly viewable at https://twitter.com/BrennanTPrice

Santa Rosa Island (CM93 and CM94) - August 20-22, 2018
Ron, AD0DX, using the call sign W6R, will be operating from Santa Rosa Island in the Channel Islands August 20-22 to activate grid square CM93, with a few passes from the CM93/CM94 grid line. Ron will be mainly active on the FM satellites AO-91, AO-92 and SO-50. Just learning to operate on the linear birds, he hopes to be active on FO-29, CAS-4A and CAS-4B. More information is available on AD0DX's QRZ page, with updates while on the island will be posted on Twitter, publicly viewable at https://twitter.com/ad0dx

Minnesota (EN27) - August 25-31, 2018
Kirk, N0KK, will be in EN27, with possible road trips to EN16/17 and EN36, August 10th and 11th. Kirk Will attempt as many FM passes as

possible on AO-91/92, SO-50. Specific pass announcements will be
posted to Twitter, publicly viewable at
https://twitter.com/radiozerokk

Lawrence, KS (EM28, EM29) - August 26-28, 2018
Greg, N4KGL, will be in activating the EM28/EM29 gridline, while
in Lawrence Kansas. More specific plans are forthcoming.

Kansas QSO Party (DM97) - August 26
Ron, AD0X will be participating in the Kansas QSO Party from DM97.
Updates will be posted on Twitter, publicly viewable at
https://twitter.com/ad0dx

Please submit additions or corrections to ke4al at yahoo dot com.

[ANS thanks Robert, KE4AL for the above information.]

ARISS News

+ Upcoming ARISS Contact Schedule as of 2018-08-07 18:00 UTC

Nagoya Technical High School, Nagoya, Japan, direct via JA2YNI.
The ISS callsign is presently scheduled to be NA1SS.
The scheduled astronaut is Ricky Arnold KE5DAU.
Contact is a go for: Mon 2018-08-13 09:23:09 UTC 82 deg.

Matthes-Enderlein-Gymnasium Zwönitz, Zwönitz, Germany and
Hohenstaufen-Gymnasium Kaiserslautern, Kaiserslautern, Germany,
direct via DLØMEG and DLØXK.
The ISS callsign is presently scheduled to be DPØISS.
The scheduled astronaut is Alexander Gerst KF5ONO.
Contact is a go for: Mon 2018-08-13 13:48:27 UTC 56 deg.

DLR_School_Lab Braunschweig, Braunschweig, Germany, direct via DN2DLR.
The ISS callsign is presently scheduled to be DPØISS.
The scheduled astronaut is Alexander Gerst KF5ONO.
Contact is a go for: Tue 2018-08-14 12:56:59 UTC 76 deg.

ARISS is always glad to receive listener reports for the above
contacts. ARISS thanks everyone in advance for their assistance.
Feel free to send your reports to aj9n at amsat dot org
or aj9n at aol dot com.

[ANS thanks Charles Sufana, AJ9N for the above information.]

+ ARISS congratulations the following mentors who have now mentored
over 100 schools:

Francesco IKØWGF with 132
Satoshi 7M3TJZ with 130
Gaston ON4WF with 123
Sergey RV3DR with 106

[ANS thanks Charles Sufana, AJ9N for the above information.]

Satellite Shorts From All Over

+ Rocket Fever" in Downey CA, 18 August 2018
AMSAT will be part of a larger effort representing amateur radio at

"Rocket Fever", an event at the Columbia Memorial Space Center in Downey, California. This event will take place on Saturday, 18 August 2018. More information about the event is available at:

http://columbiaspacescience.org/news-events/event/rocket-fever-4/

The Associated Radio Amateurs of Long Beach and the Downey Amateur Radio Club will be the local radio clubs spearheading the amateur radio booth at the event:

http://aralb.org/ (ARALB)
http://darcarc.wordpress.com/ (Downey ARC)

During the day, there will be demonstrations using different satellites from the grounds of the Columbia center. Most likely, WD9EWK will be the call sign used for these demonstrations. If you hear the demonstrations on the air, please feel free to call and join in. The Columbia center is in grid DM03, Los Angeles County. If WD9EWK is used for the satellite demonstrations, I will upload the QSOs to Logbook of the World after the event, and QSL cards will be available on request (no QSL card or SASE is needed; just e-mail me with QSO details).

During this event, I will use my @WD9EWK Twitter account to post updates and pictures. Even if you don't use Twitter, these posts are available to anyone using a web browser at:
http://twitter.com/WD9EWK

+ While many are preparing for the first Phase 4 amateur payload in a geostationary satellite, the first Phase 5 amateur payload is already operational in an elliptical orbit around the Moon. The last transmissions from LongJiang 2 were on 2018-08-05 from 00:30 to 02:30 UTC and from 07:30 to 09:30 UTC on 435.400 MHz and 436.400 MHz.

Various experiments are being carried out with GMSK and JT4G downlink signals. Stations with 'normal' amateur equipment can receive the downlinks quite well. Downlink signals have even been received with no more than an Arrow antenna, no preamp.

DK5LA was the first to have his signals relayed through LongJiang 2 on 2018-07-15. On August 4, the first picture of an onboard camera was downlinked with SSDV. Other experiments will follow later. Why not give LongJiang 2 a try?

[ANS thanks Nico, PA0DLO for the above information.]

+ The South Indian Ocian has many active satellite operators in the region, mainly from Mauritius (3B8), Reunion (FR), South Africa (ZS) as well as from Madagascar 5R8 sometimes. In spite many countries reachable particularly on FO-29 they report not hearing much traffic except for regular QSO's with Thailand thanks to Kob, E21EJC.

Active operators reachable around the Indian Ocean (West Africa, Middle-East, Asia and Oceania) may not be looking that way as they are not expecting any traffic and also due to time difference.

Stations in the South Indian Ocean area would like to QSO with others in that part of the globe. "Look for us on the birds!"

[ANS thanks Jean Marc, 3B8DU for the above information.]

+ The AMSAT-UK payload for the ESEO satellite was delivered to Italy

last week. The mode LV transponder and the antennas will be integrated into the satellite over the next few weeks.

[ANS thanks AMSAT-UK and David Bowman, G0MRF for the above information.]

+ There will be an AMSAT village at EMFcamp. The Electromagnetic Field event takes place at Eastnor Castle Deer Park, Herefordshire Aug 31-Sept 2. Electromagnetic Field (EMF) is a non-profit UK camping festival for those with an inquisitive mind or an interest in making things: hackers, geeks, scientists, engineers, artists, and crafters.

[ANS thanks AMSAT-UK for the above information.]

+ The FCC has issued call sign WJ2XLT to LeoLabs for satellite and space debris tracking from Menlo Park CA at 2.9-3 GHz with a transmission power of 2,500,000 W. The licensee requested that details be withheld from the public for 10 years.

[ANS thanks Experimental Radio Service for the above information.]

+ Chinese state missile maker CASIC and its commercial space subsidiary Expace is preparing to launch its Kuaizhou-1A (Y8) solid rocket before the end of September, carrying the Centispace-1-1S test satellite into 700 km SSO.

This mission will be additional to the approximately 35 being planned by main space contractor CASC for 2018.This means that together with CASC, emerging players like Expace, Landspace and potentially OneSpace, there could be around 40 Chinese launches in 2018.

[ANS thanks AMSAT-UK and Andrew Jones for the above information.]

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In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive addi-tional benefits. Application forms are available from the AMSAT Office.

Primary and secondary school students are eligible for membership at one-half the standard yearly rate. Post-secondary school students enrolled in at least half time status shall be eligible for the stu-dent rate for a maximum of 6 post-secondary years in this status. Contact Martha at the AMSAT Office for additional student membership information.

73 and Remember to help keep Amateur Radio in space,
This week's ANS Editor,
Frank Karnauskas, N1UW
n1uw at amsat dot org

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ADDITIONAL COMPONENT BULLETINS RECOVERED FROM OTHER POSTS
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SB SAT @ AMSAT $ANS-224.02
ANS-224 AMSAT News Service Weekly Bulletins

AMSAT News Service Bulletin 224.02
 >From AMSAT HQ KENSINGTON, MD.
August 12, 2018
To All RADIO AMATEURS
BID: $ANS-224.02

YOTA Group Earns AMSAT Satellite Communicators Club Awards

Faith Hannah Lea, AE4FH, reports from the YOTA Camp in South Africa, that about 20 youth members from the Camp made their first satellite contacts. The group had launched a BACAR (Balloon Carrying Amateur Radio) - a high altitude balloon with various radio equipment on-board to explore near-space. While waiting for the data to return from the BACAR package, the YOTA group operated from grid KG43 on multiple satellites, ranging from SO-50, AO-91, & AO-92. "All the YOTA ZS9 members, who made their first satellite contact will receive the AMSAT Satellite Communicators Club Award" said Bruce Paige, KK5DO, AMSAT Director, Contests & Awards.

Thirteen-year-old Faith Hannah Lea, AE4FH, of Palm Coast, Florida, is the only representative of International Amateur Radio Union Region 2 (IARU R-2) at the Youngster On The Air Camp 2018 this week in South Africa. The YOTA ZS 2018 Camp has eighty participants aged from 16 to 25, and from over 30 countries that have been invited to attend a fun-filled week of Amateur Radio from the 8th to the 15th August 2018.

More information is available at:

http://hamradio.world/
https://www.ham-yota.com/category/yota-2018/
http://www.arrl.org/news/young-us-radio-amateur-will-be-sole-iaru-region-2-attendee-at-yota-camp

(ANS thanks the ARRL, AMSAT-NA, SARL, YOTA, and Faith, AE4FH for the above information)

/EX

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73 and Remember to help keep Amateur Radio in space,
This week's ANS Reviewer,
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